IMPACT OF FOREIGN DIRECT INVESTMENT IN TELECOMMUNICATION INDUSTRY: EMPIRICAL EVIDENCE FROM INDIA

A

Synopsis

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In

Applied Business Economics

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INTRODUCTION

1.1 Foreign Direct Investment (FDI)

Foreign direct investment (FDI) is a category of cross border investment in which an investor resident in one economy establishes a lasting interest in and a significant degree of influence over an enterprise resident in another economy. Ownership of 10 percent or more of the voting power in an enterprise in one economy by an investor in another economy is evidence of such a relationship. FDI is a key element in international economic integration because it creates stable and long-lasting links between economies. FDI is an important channel for the transfer of technology between countries, promotes international trade through access to foreign markets, and can be an important vehicle for economic development. The indicators covered in this group are inward and outward value of stocks, flows and income, by partner country and by industry and FDI restrictiveness.

Economic Growth and FDI Policy in India FDI has been recognized as an important factor for economic growth and development. India's economic reforms way back in 1991 has generated strong interest in foreign investors and turning India into one of the favorite destinations for global FDI flows. In fact, FDI policy reform formed part of the first package of industrial reforms in July 1991 and was reflected in the Industrial Policy announced in 1991: "Foreign investment would bring attendant advantages of technology transfer, marketing expertise, introduction of modern managerial techniques and new possibilities for promotion of export. The government will therefore welcome foreign investment which is in the interest of the country's industrial development."

More recently, the Economic Survey 2008-09 described that:

"FDI is considered to be the most attractive type of capital flow for emerging economies as it is expected to bring latest technology and enhance production capabilities of the economy.", UNCTAD' World Investment Report, 2010 considers India the 2nd most attractive destination among the TNCS after the China. The positive perceptions among investors as a result of strong economic fundamentals driven by 18 years of reforms have helped FDI inflows grow significantly in India.

"Telecommunication has been recognized world-over as an important tool for socio-economic development for a nation and plays a phenomenal role in growth and modernization of various sectors of the economy. Over the last few years, Indian telecom market has shown overwhelming growth thanks

to domestic demand, policy initiatives undertaken by the government and admirable efforts by the players of the industry and in the process, has managed to emerge as one of the youngest and fastest growing economies in the world today. Factors like regulatory liberalization, structural reforms and competition played a very important part in this rapid transformation"

(Source: https://doi.org/10.33545/26633140.2021.v3.i1a.69)

1.1.1 Concepts and Definitions

Foreign direct investment (FDI) is defined as an investment reflecting a lasting interest and control by a foreign direct investor, resident in one economy, in an enterprise resident in another economy (foreign affiliate).

FDI inflows comprise capital provided by a foreign direct investor to a foreign affiliate, or capital received by a foreign direct investor from a foreign affiliate.

FDI outflows represent the same flows from the perspective of the other economy. FDI flows are presented on a net basis, i.e., as credits less debits. Thus, in cases of reverse investment or disinvestment, FDI may be negative. FDI stock is the value of capital and reserves attributable to a non-resident parent enterprise, plus the net indebtedness of foreign affiliates to parent enterprises. (UNCTAD)

1.1.2 Trends and global patterns

FDI fell dramatically in 2020 during the COVID-19 crisis. Global FDI flows dropped by 35 per cent in 2020, to US$1.0 trillion from US$1.5 trillion in 2019. This is almost 20 per cent below the 2009 financial crisis level. The decline was heavily skewed towards developed economies, where FDI inflows fell sharply by 59 per cent to US$329 billion in 2020, a level last seen in 2003. FDI flows to Europe fell by 78 per cent, largely because of negative FDI in countries with significant conduit flows, such as the Netherlands and Switzerland. FDI to North America declined somewhat less sharply, by 42 per cent. FDI to developing economies decreased at a more moderate 9 per cent rate, mainly because of robust flows in Asia. The fall in FDI flows across developing regions was uneven, with 45 per cent in America and 16 per cent in Africa. In contrast, flows to Asia rose by 3 per cent.

(Source: UNCTAD Handbook of Statistics 2021 - Economic trends/ https://unctad.org/)

1.2 TELECOMMUNICATION SECTOR AND FDI INFLOWS IN INDIA

1.2.1 Telecommunication Sector

Introduction

Telecommunications sector plays a dual role in economic activities, not only itself a distinct circle in economic system but also a supplying mean for other sectors. Telecommunications cover and relate to many other industrial and economic sectors such as manufacture, entertainment, and communication sectors. Foreign investment has been one of the most important driving forces in the exploration of natural resources and improvement of economic conditions in underdeveloped and developing countries for centuries. Recently, foreign investment has not only increased rapidly but also covered a wide spectrum of industries around the world. The role of foreign investment has played a more and more important role in the world's economy.

Among FDI, telecommunications are one of the most strategic industries of national economic control. Even though foreign investments on telecommunications will bring advanced technological skills, large amount of funds, as well as market competition and will benefit national telecommunications development, many countries guide policy and legal requirements to control foreign investment to correspond to their economic and developmental demands. Telecommunications have a substantial and important influence on national security, social stability and economic development, as well as many industrial sectors. Due to its particular character, telecommunication industries are often state-operated and monopolized in many countries. Therefore, the balance between economic gains from foreign investment and national telecommunications sovereignty presents a challenging task.

1.2.2 FDI ON TELECOMMUNICATIONS AND ECONOMIC GROWTH

Investment in telecommunications is a prerequisite for broad based economic development. The dual role of telecommunications as both a traded service and a vehicle for trade in other service sectors means that price reductions, improvements in the level of investment and the development of infrastructure and services brought about by liberalization should also have an impact on other sectors of the economy. In addition, efficient, low-cost telecommunication networks will provide the necessary platform for the growth of electronic commerce. The implementation of liberalized telecommunication investment should produce significant benefits not only within the country's telecommunication sector

but also for the national economy as a whole. The opening of telecommunication markets has facilitated the entry of domestic and foreign private capital and technological skills that have in turn accelerated network buildout, the provision of new services and improvements in the quality of service. Market liberalization also has a profound effect in promoting development in other sectors such as information technology and computing, which depend heavily on good, reliable and low- cost telecommunications. Economic development in these sectors indeed has been constrained in many countries because of the lack of an adequate telecommunication infrastructure to service them. Inadequate telecommunications also reduce efficiency throughout the economy, diminishes the effectiveness of investments and development programs, causes a comparative disadvantage in attracting investment, and lowers the quality of living standard as well as personal access to communication. The evidence leaves no doubt that there was indeed a correlation between economic development and investment on telecommunications. Throughout economic developmental history, telecommunication infrastructure has played an important role in supporting the economic development of countries. There are numerous documented examples about the direct relationship between investment in telecommunication infrastructure and economic growth. The growth of global telecommunication development will bring rapid expansion of new and advanced information services, attract more domestic and foreign investments, and improve economic development and global competitiveness, as well as a better living standard of health care and education.

Table 1: Foreign Direct Investment (FDI) Inflows

Years / (In US $Million)	Total FDI inflows	FDI inflows in Telecom Sector	Overall growth (%)
2009	27,098	2,359	(18)
2010	21,007	1,327	(22)
2011	27,579	1,989	31
2012	22,789	71	(34)
2013	22,035	82	(3)
2014	28,784	2,670	31
2015	39,328	1,072	37
2016	46,403	5,539	18
2017	44,857	6,212	-
2018	33,492	2,292	(7)
2019	36,769	4,291	10

2020	**51,470**	**357**	**40**
2021	**31,153**	**376**	**4**

(Source: https://dpiit.gov.in/publications/fdistatistics/archives)
(Note*: Figures in bracket show negative growth)*

1.2.3 Overall FDI Flows

As per the UNCTAD World Investment Report 2021, Global foreign direct investment (FDI) flows fell by 35 per cent in 2020, reaching $1 trillion, from $1.5 trillion in 2019. This is the lowest level since 2005 and almost 20 per cent lower than the 2009 trough after the global financial crisis. The lockdowns around the world in response to the COVID-19 pandemic slowed down existing investment projects, and the prospects of a recession led multinational enterprises (MNEs) to re-assess new projects. The fall in FDI was significantly sharper than the fall in gross domestic product (GDP) and trade.

(Source: UNCTAD World Investment Report 2021)

FDI Inflows

FDI flows to developed economies fell by 58 per cent to $312 billion. The decline was inflated by strong fluctuations in conduit and intra firm financial flows, and by corporate reconfigurations. The value of net cross-border M&A sales in developed economies, normally the most important FDI type in those economies, decreased by 11 per cent to $379 billion. The values of announced Greenfield investments and cross-border project finance deals declined by 16 per cent and 28 per cent, respectively. Aggregate inflows in Europe plummeted by 80 per cent, reaching only $73 billion. FDI fell in European countries that have significant conduit flows (in addition to the Netherlands, Switzerland remained in negative territory), but it also dropped in large economies such as the United Kingdom (-57 per cent), France (-47 per cent) and Germany (-34 per cent). FDI to the European Union fell by 73 per cent to $103 billion.

(Source: UNCTAD World Investment Report 2021)

United States ranks 1st in FDI inflows with China at 2nd place and India at 8th place.

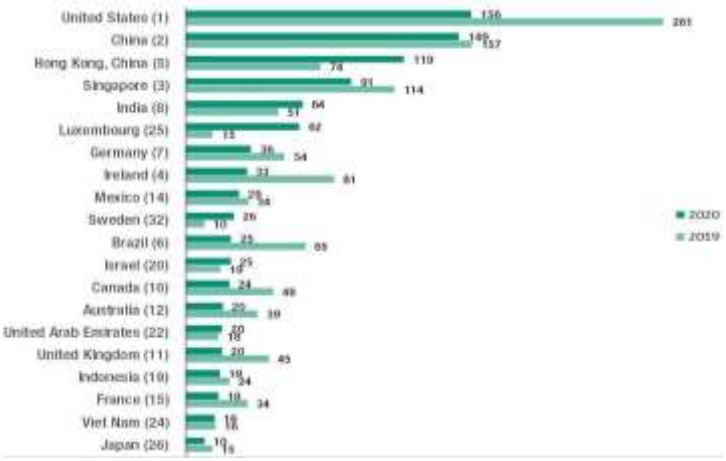

Fig 1: -FDI Inflows Ranking 2020
(Source: UNCTAD World Investment Report 2021)

Foreign Direct Investments to BRICS: Inward Flows, Annual 2009-2020

Table 2: FDI INFLOWS

Direction of FDI Inwards							US $(current million)					
Year	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
India	35634	27417	36190	24196	28199	34528	44064	44481	39904	42156	50558	64062

(Source: UNCTAD FDI Statistics, https://databank.worldbank.org/)

FDI outflows

In 2020, MNEs from developed economies reduced their investment abroad by 56 per cent, to $347 billion. As a result, their share in global outward FDI dropped to a record low of 47 per cent. As with inflows, the decline in investment by major investor economies was exacerbated by strong volatility in conduit flows. Aggregate outward investment by European MNEs (including large negative flows) fell by 80 per cent to $74 billion – the lowest amount since 1987. This fall was driven by sharp declines in outflows from the Netherlands, Germany, Ireland and the United Kingdom. Outflows from the Netherlands – normally among the largest source countries in Europe – dropped by $246 billion to -$161 billion, owing to corporate reconfigurations and holding company liquidations. Despite several sizeable acquisitions abroad by German MNEs, large withdrawals of loans (-$55 billion) reduced FDI outflows by 75 per cent. In the United Kingdom, outflows declined from -$6 billion to -$33 billion, with continued large negative reinvested earnings. In addition, MNEs from the United Kingdom divested

some of their assets abroad. For example, Tesco sold its stores in Thailand for $9.9 billion and Vodafone unloaded its tower assets in Italy for $5.8 billion.

Japan ranks 1st in FDI Outflows with Germany at 2nd place and India at 20th place

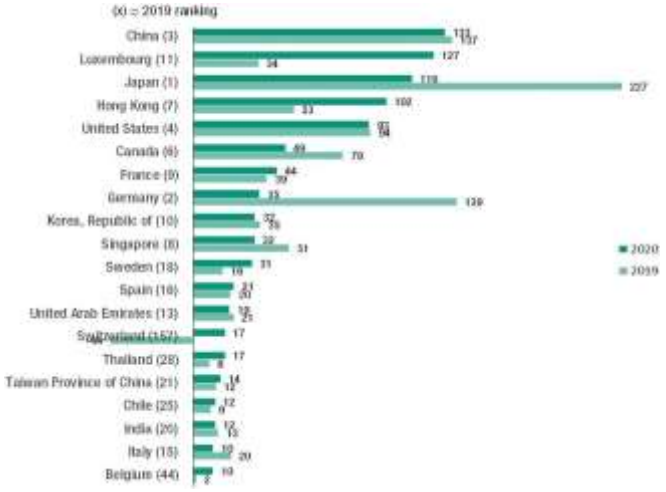

Fig 2: -FDI Outflows Ranking 2020
(Source: UNCTAD World Investment Report 2021)

Foreign Direct Investments to BRICS: Outward Flows, Annual 2009-2020

Table 3: FDI OUTFLOWS

Direction of FDI Inwards							US $(current million)					
Year	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
India	**16058**	**15947**	**12456**	**8486**	**1679**	**11783**	**7572**	**5072**	**11141**	**11447**	**13144**	**11560**

(Source: UNCTAD FDI Statistics, https://databank.worldbank.org/)

2.0 REVIEW OF LITERATURE

Brajesh Mishra, Sajal Ghosh, Kakali Kanjilal (2020): Evaluation of import substitution strategy in Indian telecom sector: Empirical evidence of non-linear dynamics. The outcomes of the study suggest that the import, FDI, and Index of Industrial Production (IIP) in the telecom sector share non-linear relationships that exhibit regime shifts, time-varying behavior, and asymmetry. The study highlights that the FDI drives the import and, in normal circumstances, FDI and imports have the potential to influence IIP in the telecom sector in the long run. The findings indicate that the policy measures adopted by the government are justifiable as the import substitution strategies have the potential to get transmitted to the telecom sector in the future. Based on the empirical findings, the study proposes a

set of policy measures, which should help the sector to grow intrinsically while lowering the import dependence.

Jyoti Gupta, Dr. Vivek Sharma (2019): An Empirical Study on Selected Determinants of FDI in Telecom Sector in India, the present study will try to examine few such factors like corruption, Number of Mobile and landline subscribers to analyze their impact on FDI in telecom sector. Few results are meeting the expectations but other contrasting.

Moinak Maiti (2018): India's services: sector, trade and employment, the purpose of this study is to detail about the India's service sector with different aspects of services and the opportunities or challenges that lie within it.

Areej Aftab Siddiqui, Shahid Ahmed (2017): Impact of Foreign Direct Investment on Sectoral Growth of Indian Economy, this paper aims at assessing the impact and relationship of FDI and Growth with each other at the sectoral level. The impact is examined through Panel co-integration test followed by the Random effects model. The Granger causality test is also applied to assess the causation of each of these. The results indicate that Growth has an impact on FDI but FDI doesn't have an impact on Growth at the sectoral level.

Jose Ramon Perea and Matthew Stephenson (2017): They studied about the Outward FDI in Developing Countries. This paper describes the rise of OFDI by developing country firms, its development impact, and policy implications. It draws on several global data sources to assess changes over time in the investment decisions of developing country multinational corporations (MNCs).

Anna Abramova, Olga Garanina (2017): Toward China: The Case of Energy and ICT Sectors. The Present study aims to shed light on the influence of sanctions on Russian multinational enterprises (MNEs) internationalization towards China using example of energy and information and communication technology (ICT) industries.

Alexandor Bulatov, Alexey Kuznetsov, Yuri Kvashnin, Ninel Seniuk (2017): In their study called Russian MNCs: Empirical and Theoretical Aspect. This Study aims that Russia being one of the leaders in outward FDI from emerging market economies and at the same time Russian MNCs have their specific features. The purpose of this chapter is to analyze characteristics of Russian MNCs by

researching relationship between specificities of Russian economic and Political model, on the one hand, and specific features of Russian MNCs on the other hand.

K. Maran, R. Anitha (2015): Impact of Foreign Direct Investment on Power Sector: An Empirical Study with Reference to India, in the later quarter of the twentieth century, the need for foreign capital is realized among the various countries of the world. Developing countries especially developed multipronged strategies to attract foreign capital into the country. One such strategy is the adoption of liberalization policy. Almost all the developing countries started opening their economy, out of the compulsion, to achieve faster rate of economic growth and development. Even a communist country like China adopted liberalization policy as a strategy for accelerated economic growth during 1979. India also joined the race by 1991, when the government announced the policy of liberalization. Th e importance of FDI extends beyond the financial capital that flows into the country. The huge size of the market in this sector and high returns on investment are two important factors in boosting FDI inflows to power sector. 100 percent FDI is allowed under automatic route in almost all the sub sectors of power sector except the atomic energy. Major foreign investment is made in this sector during 2000 to 2009 is Mauritius with an investment of US$ 4490.96 i.e., 4.24 percent of the total FDI inflows into the country during the period. The estimation of future FDI flow shows a marginal decline in the year 2010. Then from 2011 to 2015 onwards upward trend of FDI was observed.

Dr. Deepak Kumar Agarwal and Ajay Kumar Garg: An analysis of the impact of FDI on the Indian economy with special reference to the telecom sector, the present study is an attempt to examine the impact of FDI inflow on the Indian economy specifically to the telecommunication sector. In this study, the researcher has tried to know the overall trend of FDI inflow and sub-sector-wise FDI inflow in the sector. The result shows that there is no sustainable growth of FDI in the telecommunication sector however; there is no significant difference between FDI inflows in the various subsectors of the telecommunication sector of the Indian economy. This also directs that there is a need to improve the policy of FDI in the telecommunication sector according to the changing scenario in the global market.

Priya Dwivedi and Jyoti Badge (2013): Impact of FDI Inflow on Service Sector in India: An Empirical Analysis, Foreign Direct Investment (FDI) plays an important role in the economic development of a country. In this research paper they have dealt with the effect of FDI inflows on the

Indian economy over the period of 2000 to 2012. A statistical model was developed on economic data to investigate the relationship between FDI inflow and Gross Domestic Product (GDP) especially in service sector. This analysis has revealed that Foreign Direct Investment has positive and significant impact on GDP.

Shumaila Hashim, Akhtar Munir, Afnan Khan (2009): Foreign Direct Investment in Telecommunication Sector of Pakistan: An Empirical Analysis. This study examines the evidence concerning the empirical relevance between foreign direct investment (FDI) attraction in the telecommunication sector of Pakistan and its determinative effects. In this paper, they have focused on assessing the relative significance of the factors that may attract FDI in the telecommunication sector.

Dr. Vinod K. Bhatnagar, Ms. Parul Tomar, and Amitabh Maheshwari (2013): In their studies called Impact of foreign direct investment on the profitability: A Study of telecom companies in India" The researcher studied the existing status of the telecommunication sector in India, to find out year wise contribution of FDI in the telecommunication sector in India, to find out the relationship between EAT and FDI and to find out the relationship between EPS and FDI. EAT and EPS were used as the independent variables and FDI was used as the dependent variables. The study revealed that there is less linear relationship among FDI, EPS, and EAT.

Ellis L. C. Osabutey Chris Okoro (2015): Political Risk and Foreign Direct Investment in Africa: The Case of the Nigerian Telecommunications Industry, this study examines the impact of political risk on FDI flows in a Sub-Saharan Africa (SSA) context using the 12 political risk components published as the International Country Risk Guide (ICRG) by the Political Risk Services (PRS) Group with the Nigerian telecommunications sector as a case study. The study also finds that political risk has a significant influence on the inflow of FDI into developing economies in SSA such as Nigeria and that the 12 components affect FDI in different ways. Irrespective of the political risk rating, a consistent improvement in composite political risk enhances FDI inflow. Among the 12 components, corruption, law and order, democratic accountability, and investment profile were found to have significant influences on FDI inflow into the Nigerian telecommunications sector.

Dr. R. Pichumani (2014): A Study on Impact of FDI To Economic Development of India- A Sector wise Analysis, Foreign Direct investment (FDI), being a non-debt. Capital flow is a leading source at external financing, especially for the developing economics. It not only brings in Capital and technical know-how but also increases the Competitiveness at the economy. Overall, it supplements domestic investment, much required for sustaining the high growth at the country. Since 2000, significant changes have been made in the FDI policy regime by the govt to ensure that India becomes an Increasingly attractive and investor - friendly destination. The current phase at FDI policy is characterized by negative listing, permitting FDI freely except in a few sectors Indicated through a negative list. Under the current policy regime, there are three broad entry options for foreign direct investors, in a few sectors, FDI is not Permitted (negative list). In another small Category at sectors, Foreign investment is Permitted only till a Specified level at foreign equity Participation, and the third Category, Comprising all the other Sectors, is where foreign investment up to 1000 percent at equity Participation is allowed, this study identified the category of sectors, in few sectors FDI is not permitted in another small category FDI is permitted only till a specified level at foreign equity participation and the third category comprising all the other sectors, is where foreign investment up to 100 percent at equity participation is allowed.

Seiko Minota Zekarias (2015): The Impact of Foreign Direct Investment (FDI) on Economic Growth in Eastern Africa: Evidence From Panel Data Analysis the finding from the study confirms that the FDI has positive and marginally significant effect of FDI on economic growth also FDI is a key driver of economic growth and a catalyst to economic conditional convergence in Eastern Africa so the sub-region needs to attract more FDI by improving investment environment, strengthening regional integration, developing human capital and basic infrastructure and promoting export-oriented investment.

Kotenkova S.N, Davletshin E.A., Volkova N.V. (2015): They studied about Comparative Analysis of FDI Determinants in Russia and BRICS Countries. In this paper different economic indicators and variables as a factor of FDI growth are investigated. In the first part were given different classifications of FDI determinants. The second part was based on quantitative analysis of FDI determinants in BRICS countries. Data for analysis was provided by World Bank database of economic statistics. The last part

includes polynomial regression model for Russia's FDI inflows and their dependence on different variables.

Sukalpa Chakrabarti, Ishita Ghosh (2013): FDI in Africa: A Comparison of the Indian and Chinese Experience. The study mainly focused on the quantitative data, at the same time the study revealed the similarities and dissimilarities in the patterns of development cooperation of the two Asian giants in Africa to provide better insight on the specific consequences of Indian and Chinese FDI for economic development in Africa.

Recep Kok, Bernur Acikgoz Ersoy (2009): Analyses of FDI determinants in developing countries, the interaction of FDI with some FDI determinants have a strong positive effect on economic progress in developing countries, while the interaction of FDI with the total debt service/GDP and inflation have a negative impact.

Vintila Denisia (2010): Foreign Direct Investment Theories: An Overview of the Main FDI Theories, the purpose of this study is to identify the main trends in FDI theory and highlight how these theories were developed, the motivations that led to the need for new approaches to enrich economic theory of FDI. Although several researchers have tried to explain the phenomenon of FDI, we cannot say there is a generally accepted theory, every new evidence adding some new elements and criticism to the previous ones.

Dr. Sandeep Bansal, Dr. Surender Kumar Gupta (2013): FDI in India- A Study of telecommunication Industry, this paper is an attempt to study current international investment in telecommunications industry. They found that a stable, transparent and non-discriminatory regulatory system is the best way to attract more foreign investment. Foreign investment in telecommunications brings technology transfer, huge capital, and increased market competition, which help national telecommunications development. The implementation of liberalized telecommunication investment should produce considerable benefits not only within the country's telecommunication sector but also for the national economy as a whole.

After reviewing the above existing literatures, the researcher has found that the topic about FDI has gained a lot of popularity throughout the world. There are numerous studies done throughout the world on the different issues of the telecommunication and FDI in telecommunication sector, as

Telecommunication has been recognized world-over as an important tool for socio-economic development for a nation and plays a phenomenal role in growth and modernization of various sectors of the economy. Many researchers have done a lot of work on the determinants of FDI, and several other factors affecting telecommunication sector and FDI, many of them have studied about the impact of FDI regarding the economic growth, competition, regulatory reforms, political factors, privatization etc. on the telecom sector efficiency.

3.0 RESEARCH GAPS

There are numerous studies done throughout the world on the different issues of the telecommunication and FDI in telecommunication sector, as Telecommunication has been recognized world-over as an important tool for socio-economic development for a nation and plays a phenomenal role in growth and modernization of various sectors of the economy.

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- Unluckily, the areas like the employment generation, Foreign Exchange Earnings are neglected from the research point of view as these areas equivalently contribute to the Indian Economy.
- Also, in the current scenario there is a drastic change as the government of India has allowed 100% FDI in the Telecom Sector via the Automatic route.

4.0 NEED OF THE STUDY

No one can ignore the fact about the importance of FDI in telecom sector. Since, the topic about FDI has gained a lot of popularity throughout the world. The past two years has been a very challenging year for the overall economic activity of the country in general and telecommunication services sector in particular, due to the unprecedented pandemic situation. However, during these challenging times, the telecommunication sector continued to provide seamless connectivity for the smooth functioning of many activities and services. Telecom sector plays a dual role in the economic activities by providing distinct to itself in the economic system and secondly by supplying means to the other sectors. Telecom sector cover and relates to many other industrial and economic sectors like manufacture, entertainment

sector and the communication sector. In addition, efficient, low-cost telecommunication networks will provide the necessary platform for the growth of electronic commerce. The growth of global telecommunication development will bring rapid expansion of new and advanced information services, attract more domestic and foreign investments, and improve economic development and global competitiveness, as well as a better living standard of health care and education.

SOCIAL IMPLICATIONS

The meaning of FDI is not restricted only to the international movement of capital. Due to obstacles and limitations in the lack of funding knowledge, and investments in the social sectors such as education, healthcare, and banking are unable to reach out to citizens, resulting in the unequal distribution of the various resources and the uneven growth in the rural and urban areas. Foreign direct investment, by definition, has the potential to increase economic activity in the host country. Some of the essential features of FDI includes the increased employment and Economic Growth, development of backward areas, technology innovations, creations of a competitive market, provision of finance & technology. In terms of foreign direct investment in India, most industries have received foreign direct investment, but telecom is one industry that has attracted foreign direct investment in order to bring about dramatic changes in the country. In earlier times, the individuals had to wait in long lines for a phone connection, now, with the swipe of a thumb, they may receive a cellular sim to use immediately and at a considerably lower cost wherever in the country.

5.0 OBJECTIVES OF THE STUDY

- To review the regulatory framework and policies with regards to foreign direct investment in Indian telecommunication industry.
- To study the trend and pattern of FDI inflow in Indian telecommunication industry.
- To assess the impact of FDI on the performance of Indian Telecom Industry – Profitability, Foreign Exchange Earning and Employment Generation.
- To study status of Indian Telecom-Industry vis-à-vis Global Telecom Scenario.
- To check-out the SWOT for the Indian Telecommunication Industry.

6.0 HYPOTHESES

$H_0$1: There is no significant relationship between FDI inflow in Telecom industry and Economic Growth. **H_a1**: There is a significant relationship between FDI inflow in Telecom industry and Economic Growth.

$H_0$2: There is no significant impact of FDI on Employment Generation in Indian Telecom industry.

H_a2: There is significant impact of FDI on Employment Generation in Indian Telecom industry.

7.0 RESEARCH DESIGN & METHODOLOGY

Research design & methodology is the backbone of any research study. The researcher proposes the following research procedure for this study

Scope of the Study Sample Size

- Government officials: total number of 10 officials shall be selected by the researcher
- Service Providers: 20 Middle and top-level management
- Users: 100 sample

Duration of the Study

For analyzing the data, a period from 2009 onwards will be taken into consideration. The major impediment of the analyses is the lack of continuity in the availability of data regarding the different components of the investigation. Also, the evidence from the past studies show that the studies are based on the pre and post liberalization era.

DATA- TOOLS AND TECHNIQUES

- The research study will be based on the secondary data which will be collected from various sources like DEPTT. FOR PROMOTION OF INDUSTRY AND INTERNAL TRADE (DPIIT), NITI AYOG, UNCTAD, WORLD BANK, RBI and TRAI reports official websites countries
- The study is primarily based on the secondary data. Although to verify secondary data researcher will collect the primary data too. Primary data will be used to verify and validate the results of secondary data. These primary data will be collected from the officials, experts, researchers and academicians. The questionnaire will be used to find their responses and viewpoints.

- For the achievement of the stated objectives, both Descriptive and Inferential statistical tools and suitable econometric techniques will be used.

RESEARCH METHODOLOGY

Research methodology is an important constitutes of the research plan. As per the objectives of the study the following research methodology will be used:

Table 4: Research Methodology

Objectives	Research Methodology
To review the regulatory framework and policies with regards to foreign direct investment in Indian telecommunication industry.	On the basis of the literature, government reports
To study the trend and pattern of FDI inflow in Indian telecommunication industry.	Time Series Analysis
To examine impact of FDI in the Indian Telecom in the terms of: Growth**, Employment Generation, Foreign exchange earnings.**	
To study status of Indian Telecom-Industry vis-à-vis Global Telecom Scenario.	Panel data Model
To check-out the SWOT for the Indian Telecommunication Industry	For achieving the objectives, questionnaire will be prepared to take the views of expert and academicians working in this area and requested to give rank, factor analysis will be used to as per the suitable condition.

8.0 CHAPTER PLAN

Chapter-1 Introduction

Chapter-2 Reviews of Literature and Research Methodology

Chapter-3 Overview of FDI in Indian Telecom sector

Chpater-4 Data Analysis, Results and Findings

Chapter-5 Conclusion and Suggestions

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